

Date: Monday, 11/19/2007 4:05:05 PM
 User: Kim Johnston

Process Sheet

51

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: SHORT STEP ASSEMBLY
Job Number	: 35863	Part Number	: D350591121
Estimate Number	: 11672	Drawing Number	: D2351 REV E
P.O. Number	:	Project Number	: N/A
This Issue	: 11/19/2007 S.O. No. :	Drawing Revision	: E
Prsht Rev.	: NC	Material	:
First Issue	: 11 Type : LARGE FAB ASSY	Due Date	: 12/20/2007
Previous Run	: 31405	Qty:	4 Um: Each
Written By	: <u>07.11.20</u>		
Checked & Approved By	: <u>07.11.20</u>		
Comment	: Est Rev. E 02.10.21 Re-format; Incorporated D2351-041 IPP K J/R/F est rev. F 06.02.23 added grinding EC		

UNDER REVIEW

07.11.20
 PER NCR # 263

Additional Product

Job Number:



Surf

Seq. #: Machine Or Operation: Description:

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and type labels as per PPP D350-591-121CHG003

2.0 D2244116 Step Extrusion



Comment: Qty.: 0.5000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

0.5 D2244-128 Extrusion

B23404

a.m

07.11.29

4

3.0 LARGE FAB 1 LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Cut D2244-128 extrusion to 55.32" long as per Dwg D2351 using cutting table setup DT8185-G

a.m 07.11.29

2-Drill extrusion per Dwg D2351 using Jig DT8230 for rivets.

a.m

07.11.29

4

3-Deburr

a.m

07.11.29

X

4.0 BENDING BENDING MACHINE



Comment: BENDING MACHINE

Bend per Dwg D2351 using Bend Program D23561dD FT011

EL 07.11.29 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
07-11-29							

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07-11-29	3.0	cut extra steps (2x) for bender set up SCRAP R.C. Benda first penus	<i>[Signature]</i> 07/11/29	Scrap and Destroy and Replace	<i>[Signature]</i> 07-11-29 EL 7-11-29	<i>[Signature]</i> 07/11/29	<i>[Signature]</i> 07/11/29	<i>[Signature]</i> 07/11/29
07/11/29	#6.0	SCRAP all steps	<i>[Signature]</i> 07/12/05	Scrap and Destroy all cut as per NCR 063	<i>[Signature]</i> 07/11/30 x4	<i>[Signature]</i> 07/11/30	<i>[Signature]</i> 07/12/05	<i>[Signature]</i> 07/12/30

NOTE: Date & initial all entries

Date: Monday, 11/19/2007 4:05:06 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHORT STEP ASSEMBLY

Job Number: 35863

Part Number: D350591121

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

C 2/11/21 x4

6.0

D28501

End Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2850-1 End Bracket

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel Fwd and Aft end for welding

2-Weld Aft End Bracket per QSI 004 & Dwg D2351 using Welding Jig DT8033

A/R Aluminum Rod

3-Do not Grind Flush

8.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

W/O:		WORK ORDER CHANGES					
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Drawing Name: SHORT STEP ASSEMBLY

Job Number: 35863

Part Number: D350591121

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

D2582

Hi-Skid Step Leg Ass'y



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2582

Step Leg Assy

13.0

MS20600AD4W3

Cherry Rivets



Comment: Qty.: 16.0000 Each(s)/Unit Total : 64.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

16 MS20600AD4W3 Rivet

14.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Rivet Leg Assembly as per Dwg D2351

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

16.0

D267334

End Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2673-34 End Plate

17.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Weld Fwd End Plate per QSI 004 & Dwg D2351

A/R

Aluminum Rod

2-Grind end cap flush per dwg D2351

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Job Number: 35863

Part Number: D350591121

Job Number:



Seq. #:

Machine Or Operation:

Description :

18.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

19.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

20.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Touch up Alodine

21.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

22.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk per Dwg D2351 and QSI 005 4.4

Batch: _____

23.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

24.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

25.0

D22301

Mounting Lug



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Packing KitQtyPart Number Description Batch

1 D2230-1 Mounting Lug _____

W/O:		WORK ORDER CHANGES					
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Part Number: D350591121

Job Number:



Seq. #:

Machine Or Operation:

Description :

26.0

D22303

Mounting Lug



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Packing KitQtyPart Number Description Batch

1 D2230-3 Mounting Lug _____

27.0

D2856400

Abrasion Strip



Comment: Qty.: 0.6000 f(s)/Unit Total : 2.4000 f(s)

Pick:

Packing KitQtyPart Number Description Batch

1 D2856-400 7.20" Abrasion Strip _____

28.0

AN337A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Packing KitQtyPart Number Description Batch

2 AN3-37A Bolt _____

29.0

AN413A

Bolt



Comment: Qty.: 3.0000 Each(s)/Unit Total : 12.0000 Each(s)

AN4-13A

Batch: _____

30.0

AN960JD10

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick:

Packing KitQtyPart Number Description Batch

4 AN960JD10 Washer _____

31.0

AN960JD416

Washer



Comment: Qty.: 6.0000 Each(s)/Unit Total : 24.0000 Each(s)

Pick:

Packing KitQtyPart Number Description Batch

6 AN960JD416 Washer _____

SCAP

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Job Number: 35863

Part Number: D350591121

Job Number:



Seq. #:

Machine Or Operation:

Description :

32.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Packing KitQtyPart Number Description Batch

2 MS21042L3 Nut (or -3) _____

33.0

MS21042L4

Nut



Comment: Qty.: 3.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick:

Packing KitQtyPart Number Description Batch

3 MS21042L4 Nut (or -4) _____

34.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

35.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D350-591-121

Location: _____

PPP Rev: _____

36.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



W 87.1205

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

DART

DESIGN KE	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D2351	REV. E SHEET 1 OF 2
DATE 05.11.14		TITLE HIGH FLOAT STEP ASSEMBLY	SCALE NTS
A	95.02.15	NEW ISSUE	
B	97.05.22	END CAPS CHANGED	
C	97.07.23	ADDED BUSHING AND FACING INFO	
D	98.12.17	CHANGED TO BEND, D2850 REPLACES D2357 & D2358, INCORP. DEO 9084	
E	05.11.14	UPDATE FINISHING NOTE	

D2351 HIGH FLOAT STEP ASSEMBLY PARTS LIST

Part No.	Description	QTY -041	QTY -042
D2351-041	High Float Step Assembly (LH)	X	
D2351-042	High Float Step Assembly (RH)		X
D2244-55.4	STEP EXTRUSION*	1	1
D2582	STEP LEG ASSEMBLY	1	1
D2673-34	STEP END PLATE	1	1
D2850-1	END BRACKET	1	
D2850-2	END BRACKET		1
MS20600AD4W3	RIVETS	16	16

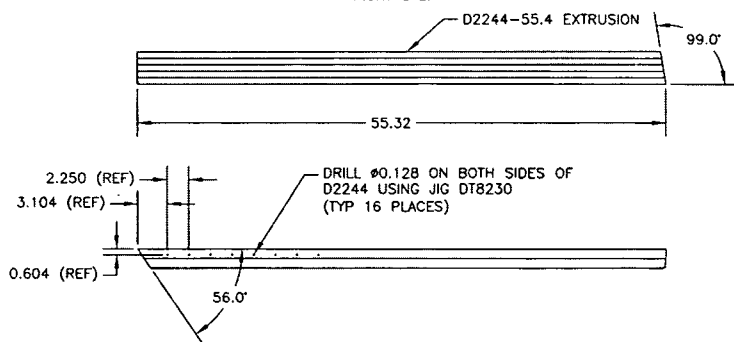
*cut per drawing

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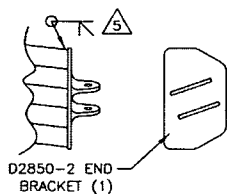
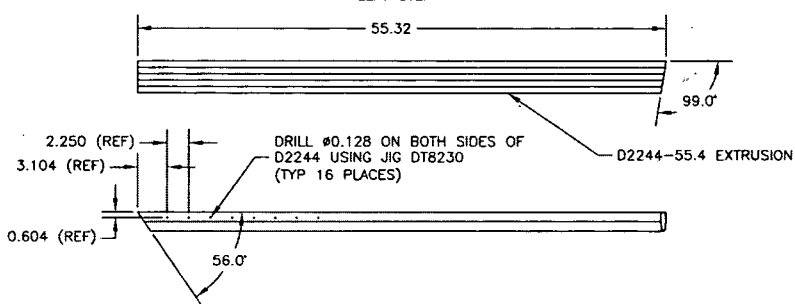
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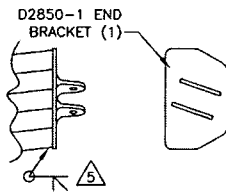
D2351-2 CUTTING/DRILLING DETAIL
RIGHT STEP



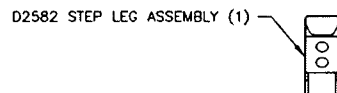
D2351-1 CUTTING/DRILLING DETAIL
LEFT STEP



DETAIL A
SCALE: 1:4



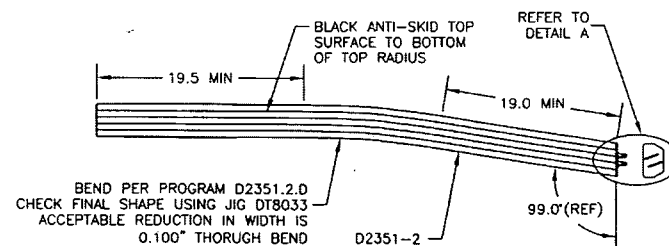
DETAIL B
SCALE: 1:4



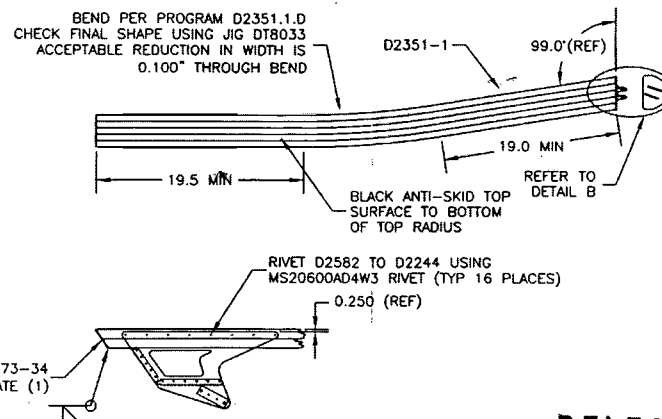
GENERAL NOTES

- 1) WELD PER DART QSI 004
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
 - 3) ALL DIMENSIONS ARE IN INCHES
 - 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) CHAMFER D2244 EXTRUSION 0.075"x45° BEFORE WELDING D2850-1 OR D2850-2 IN PLACE. DO NOT GRIND FLUSH.

D2351-042 BENDING/ASSEMBLY DETAIL
RIGHT STEP



D2351-041 BENDING/ASSEMBLY DETAIL
LEFT STEP



RELEASED
05.11.14

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DESIGN KE	DRAWN BY PH	DART	DART AEROSPACE LTD. HAMMERSLEY, ONTARIO, CANADA
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D2351	REV. E SHEET 2 OF 2
DATE 05.11.14		TITLE HIGH FLOAT STEP ASSEMBLY	SCALE 1:12

NO. 3586-3
WORK ORDER
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